



US 20160330741A1

(19) **United States**

(12) **Patent Application Publication**
KIM et al.

(10) **Pub. No.: US 2016/0330741 A1**

(43) **Pub. Date: Nov. 10, 2016**

(54) **CONTROL CHANNEL IN WLAN OFDMA**

(71) Applicant: **Apple Inc.**, Cupertino, CA (US)

(72) Inventors: **Joonsuk KIM**, Saratoga, CA (US);
Guoqing Li, Cupertino, CA (US); **Syed**
Aon Mujtaba, Santa Clara, CA (US)

(73) Assignee: **Apple Inc.**, Cupertino, CA (US)

(21) Appl. No.: **15/147,365**

(22) Filed: **May 5, 2016**

Related U.S. Application Data

(60) Provisional application No. 62/157,339, filed on May 5, 2015.

Publication Classification

(51) **Int. Cl.**
H04W 72/04 (2006.01)
H04W 52/14 (2006.01)

(52) **U.S. Cl.**

CPC **H04W 72/0453** (2013.01); **H04W 72/042**
(2013.01); **H04W 52/143** (2013.01); **H04W**
72/0413 (2013.01); **H04W 84/12** (2013.01)

(57)

ABSTRACT

Systems and methods of providing control information to wireless devices accessing a wireless network are provided. According to some embodiments, a method of wireless communication is provided. According to the method, a first wireless communication channel is assigned to a first wireless device. A second wireless communication channel is assigned to a second wireless device. A third wireless communication channel is designated for use as a control channel that is common to the first and second wireless devices and control information is transmitted to the first and second wireless devices via the third wireless communication channel.

